

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Appln. No.: 10/582,367

Attorney Docket No.: Q95188

**AMENDMENTS TO THE DRAWINGS**

Please replace Figure 3 with the attached replacement figure.

Attachment: one (1) Replacement Sheet

**REMARKS**

**I. Formal Matter**

Figure 3 and the specification are amended as shown to correct typographical errors.

Entry of these amendments is respectfully requested.

**II. Claim Objections**

Claims 1-12 are objected to due to informalities. Claims 1-12 are amended, and Applicants respectfully request that the objection be withdrawn.

Claims 2-4, 6-8, and 10-12 are objected to as being dependent upon a rejected base claim. Applicants kindly thank the Examiner for identifying that claims 2-4, 6-8, and 10-12 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants respectfully request that the rewriting of claims 2-4, 6-8, and 10-12 in independent form be held in abeyance at this time.

**III. Rejections under 35 U.S.C. § 101**

Claim 13 is rejected under 35 U.S.C. 101 as allegedly directed to non-statutory subject matter. Claim 13 is amended as shown to overcome this rejection. Applicants respectfully request that the rejection be withdrawn.

**IV. Rejections under 35 U.S.C. § 103**

Claims 1, 5, 9, and 13 are rejected under 35 U.S.C. 103(a) as allegedly unpatentable in view of Jones (US Publication 2002/1069794, hereinafter "Jones") in view of Kondylis et al.

(USPN 6,721,290, hereinafter “Kondylis”). Applicants submit that Jones and Kondylis fail to teach or suggest each and every element of the claims. Claim 1 reads in part:

... an up state in which there is a continuous connection outside for  
not less than a first predetermined time, ...

... a hit state in which a connection and a disconnection repeatedly  
occur while remaining in the hit state.

For example, neither Jones nor Kondylis teach or suggest a hit state or an up state as recited in claim 1.

In the Office Action, the Examiner acknowledges that Jones fails to disclose a hit state, and turns to the temporarily disconnected (TD) state of Kondylis to remedy this deficiency.

However, Applicants submit that at no point does Kondylis teach or suggest that a connection and disconnection repeatedly occur while remaining in the hit state as is recited in claim 1.

Kondylis teaches a multicasting network wherein the TD state occurs if a node does not receive a data packet correctly within a preset time-out (Column 13 lines 65-67). In the TD period, a node tries to connect to a select group of nodes that may have a frame position similar to that of its parent. If the node is successful, it reconnects to the network and returns to the connected state. If the node is not successful, the node then enters a disconnected state where an analysis of all nodes are performed in order to find a new parent node. Thus, for a connection and disconnection to repeatedly occur, the node would have to first leave the TD state and enter either the connected or disconnected state.

With respect to the up state, Applicants submit that Jones and Kondylis fail to teach or suggest an up state that indicates a continuous connection outside for not less than a predetermined time. In regards to Jones, the Examiner asserts in the Office Action that request managers 20 and 26<sup>1</sup>, an active state, an inactive state, and an expiry timer correspond to a virtual interface, an up state, a down state, and a predetermined time respectively. However, Jones teaches a redundancy system in which the inactive and active states are separately assigned to one of two control cards. The active and inactive states only indicate the primary and redundant card, and do not indicate a state of a link nor does the expiry timer have an effect on the state of the control card (Paragraph [0016]). Additionally, Jones teaches a Full State which may be more relevant, but neither the Full State of Jones nor the disclosure of Kondylis teach or suggest the recitations from claim 1.

Instead, Jones and Kondylis teach that a “Full” and “Connected” state that are entered as soon as a respective hello and data packet is received, as long as the packets are received before expiry of a respective expiry timer or preset time-out interval wherein the “Full” and “Connected” states enable a router to at least receive packets (Jones Paragraph [0012], [0056]; Kondylis Column 12 line 66-67). However, the “Full” and “Connected” states only signal that a single packet is received at some point within the expiry time or preset time-out interval, and these states do not reliably indicate a continuous connection as recited in claim 1. Moreover, these states are entered as soon as a packet is received and do not require that a connection is maintained for not less than the predetermined time of the expiry timer or preset time-out

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<sup>1</sup> The Office Action stated 28 instead of 26, however, this is believed to be a typographical error.

interval. Thus, these states may also indicate a partial connection or an intermittent connection within the expiry time or preset time-out interval.

Therefore, through the above arguments, Applicants submit that claim 1 is patentable over any combination of the cited references. Applicants further submit that claims 5, 9, and 13 are patentable for reasons similar to those set forth for claim 1, and that claims 2-4, 6-8, 10-12 are patentable at least by their virtue of dependency on claims 1, 5, and 9 respectively. Applicants respectfully request that the rejection of these claims be reconsidered and withdrawn.

**V. Claim Amendments and New Claims**

Claims 1-13 are amended to provide consistency and clarity within the claim language. Claims 14-24 have been added in order to more fully cover various aspects of the Applicants' invention.

All amendments and claims are fully supported in the originally filed specification. Entry of these amendments and new claims is respectfully requested.

**VI. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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